

REMARKS

The Examiner has objected to the Response filed by Applicant on June 30, 2003. The Response was filed in reply to an Office Communication by the Examiner dated June 17, 2003; and included a substitute specification in accordance with 37 C.F.R. § 1.125. In the Response, Applicant asserted that the substitute specification contained no new matter.

The Examiner's objection is based on 35 U.S.C. § 132. According to the Examiner, the phrase "number average," referring to number average molecular weight, is new matter. The phrase "number average" appears in the following areas in the specification: paragraphs [0016], [0020], [0033], [0035], [0043] of the substitute specification and in Claim 1.

The Examiner has also objected to the recitation of the ratio of isocyanate group to hydroxyl group as being about 2:1 to about 1:1.1 in the substitute specification. The original disclosure recited the ratio as being about 1.2 to about 1:1.1. The Examiner has characterized this change in ratio as being new matter. This change appears in the following places: paragraph [0029] of the substitute specification, Claim 10 (step b), Claim 20 (Step b). The Examiner has required Applicant to cancel the new matter in a reply to the Office Action.

Claims 1 and 4-29 have been rejected by the Examiner under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Subject matter is contained in the claims, said subject matter not being described in the specification in

such as way as to reasonably convey to one skilled in the art the requirement that the inventor(s) had, at the time the application was filed, possession of the claimed invention. Examiner holds that Applicant has failed to provide support for the amendment specifying that the molecular weights are number average molecular weights; and also for the amendment that changes the ratio of isocyanate group to hydroxyl group in Claims 10 and 20.

Examiner has rejected Claims 10-29 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what parameters must be satisfied for "suitable" conditions in Claim 10 (section h) and Claim 20 (section g). Also, the phrase "suitable reaction conditions is indefinite."

Examiner has rejected Claims 10-29 under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. Subject matter in the claim(s) was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant has specified, within Claims 10 -29, a ratio of about 2:1 to 1:1.1 (isocyanate group to hydroxyl group) for the "soft" polymer. Such a range encompasses polymers having isocyanate termination and polymers having hydroxyl termination. It is unclear, according to the Examiner, how the "soft" polymer can be reacted with the "hard" polymer or "hard" segments, since the soft polymer can be terminated with hydroxyl functionality. It is, therefore, unclear as to how a "soft" polymer can react with

a “hard” polymer when both have the same terminal functionality (hydroxyl groups).

This ambiguity is particularly pertinent with regard to claim 10.

Examiner has rejected Claims 10-29 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as his invention. Examiner contends that the glycol has not been distinguished from the “polyol prepolymer” and that therefore no meaningful nor quantitative distinction can be made between the “soft” segment and “hard” segment of the invention. The Claims 10-29 are indefinite because the applicant has failed to distinguish between “soft” segment and “hard” segment,” a concept which appears to be central to applicant’s invention.

Finally, because the examiner has established new ground(s) for rejection, he has made the office action FINAL. (MPEP § 706/07(a)).

Applicant believes that no new matter has been entered into the application per his response on June 30, 2003. However, Applicant has removed with traverse all alleged new matter in the specification and the claims as by amendment. All phrases relating to number average molecular weight of oligomeric or polymeric materials have been removed. The phrase “number average molecular weight” has been removed, as by amendment at the following places: paragraphs [0016], [0020], [0033], [0035], [0043] in the substitute specification, and Claim 1.

Applicant has removed the alleged new matter relating to the ratio of isocyanate group to hydroxyl group as being about 2:1 to about 1:1.1. The original disclosure has

replaced the alleged new matter, the ratio of the original disclosure being about 1.2 to about 1:1.1. In both cases, the ratio of isocyanate group to hydroxyl group fluctuates on either side of 1:1. The change back to the original disclosure is evident in the following places: paragraph [0029] in the substitute specification, Claim 10 (step b), and Claim 20 (step b). In summary, applicant has cancelled all new matter to be in compliance with the Examiner's request as stated in the Office Action.

Applicant has overcome the Examiner's rejection of Claims 1 and 4-29 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The rejection has been overcome by applicant's amendment of paragraphs: [0016], [0020], [0029], [0033], [0035], [0043] in the substitute specification, Claim 1, Claim 10 and Claim 20.

Applicant has overcome the Examiner's rejection of Claims 10-29 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant has deleted the alleged indefinite phrase "suitable reaction conditions" in Claim 10 (section h) and Claim 20 (section g).

Examiner has made an error in rejecting Claims 10-29 under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. He is correct in asserting that, with the ratios as disclosed and claimed, the "soft" polymer can be terminated on both ends with a hydroxyl functionality. Although it is chemically possible for a first hydroxyl-terminated polymer to react with a second hydroxyl-terminated

polymer, as by a dehydration mechanism, to give an ether linkage; the disclosure at paragraph [0031] in the substitute specification is clear that such is not the case, but rather that excess diisocyanate is added to the combination of “soft” polymer and “hard” polymer “to obtain a ratio of free isocyanate groups to free hydroxyl groups of about 1:1.”

Applicant believes he has overcome Examiner’s rejection of Claims 10-29 under 35 U.S.C. § 112, second paragraph, as being indefinite. Applicant has amended Claims 1 and 10-29 to distinguish between “glycol” and “polyol prepolymer.” The “glycol” is a “C₂-C₆ glycol”; and the polyol prepolymer is a “member selected from the group consisting of hydroxyl terminated polyester glycols, hydroxyl terminated polyether glycols, hydroxyl terminated polyether/polyester glycols and mixtures thereof.” Applicant believes that the amendment gives a meaningful distinction between the “glycol” and the “polyol prepolymer,” and thus a meaningful distinction ultimately between the “soft” segment and the “hard” segment which distinction is necessary to overcome the Section 112, second paragraph, rejection. Support for the amendments can be found throughout the substitute specification, namely, in paragraphs: [0014], [0016], [0022], [0032], [0033], [0034], [0035], [0036], and [0038].

Applicant has amended Claim 27 to correspond with Claim 17. Although it is true that the “organic diisocyanate” can be liquid under STP conditions, the intent of dependent Claim 27 is to read on the polyol prepolymer in liquid form under STP conditions. Support for the amendment can be found in paragraph [0034] of the

substitute specification. Applicant has amended Claim 20 at section (f) by replacing the misspelled word "diisocyanate" and at section (h) by replacing the misspelled word "polyurethane." No new matter has been added to the application by this amendment.

Included with this response are two affidavits prepared in accordance with 37 C.F.R. § 1.132 and signed by Dr. W. Kenneth Wilkinson and Dr. Charles Goodrich respectively. Both individuals testify that one of ordinary skill in the art would know that the average molecular weights of the melt spinnable polyurethane polymers of the present invention, which average weights are about 200,000 and above, are specifically number average molecular weights.


Applicant wishes to thank the Examiner for the courtesy of the interview on Thursday, May 6, 2004. Agreement with respect to the claims was not reached, although Claims 1 and 4-29 were discussed. Applicant agreed, during the interview, to consider addressing the new matter issues as by amendment and/or argument that the "new matter" is an inherent or accepted characteristic. Applicant also agreed to provide evidence that there is present in the application for letters patent adequate enablement for one of ordinary skill in the art to control or modify the index ratio of the respective hard and soft polymer segments.

Applicant requests extension of one month. Please charge the requisite fee of \$55.00 to deposit account number 500846. Please charge any additional fees to the same deposit account.

In view of the foregoing, Applicant respectfully requests reconsideration of the

present application, as amended, and asks that the Examiner hold that the present application is now in condition for allowance.

Respectfully submitted,

A handwritten signature in cursive script, reading "Leander F. Aulisio". The signature is written in dark ink and is positioned above a horizontal line.

Leander F. Aulisio
Reg. No. 31,732

Date: June 14, 2004